

REMARKS

Claim For Foreign Priority

Applicants submit herewith, under 37 C.F.R. § 1.55, a certified copy of Japanese Patent Application No. Hei 8-185216, entitled "Novel VEGF-Like Factor" and filed July 15, 1996, an English translation of the certified copy, and a statement by Kazunori Hashimoto verifying that the translation of the certified copy is true and correct.

Rejection Under 35 U.S.C § 102(e)

Claim 2 stands rejected under 35 U.S.C § 102(e) as anticipated by Achen et al. (U.S. Patent No. 6,235,713 ("the '713 patent") issued on May 22, 2001). The Office states:

Achen et al. disclose a nucleic acid molecule (SEQ ID NO: 4) which is 99.7% identical to the nucleic acid molecule of the instant specification (SEQ ID NO:2). This nucleic acid molecule would clearly hybridize under the conditions of the instant claims, and also encodes a VEGF protein. It should also be noted that the protein of Achen et al. has the identical amino acid sequence of the VEGF protein of the instant application. Therefore, the instant claim is anticipated by the prior art.

This rejection should be withdrawn.

For the following reasons, the '713 patent does not anticipate claim 2.

Achen's priority information is as follows:

60/023,751	filed August 23, 1996	now abandoned
60/031,097	filed November 14, 1996	now abandoned
60/038,814	filed February 10, 1997	now abandoned
60/051,426	filed July 1, 1997	now abandoned
09/100,391	filed August 21, 1997	now U.S. Pat. No. 6,235,713

Provisional Application 60/023,751 (filed 08/23/96)

The '751 provisional application was filed with 35 pages of specification (including claims), 5 pages of sequence listing (SEQ ID NOs: 1-3), and 6 sheets of drawings (Figure 1a-3). SEQ ID NO: 4, which is a cDNA from human lung, was not disclosed. Furthermore, the VEGF-D protein of SEQ ID NO: 5 was not disclosed. Accordingly, with respect to SEQ ID NO: 4 and SEQ ID NO: 5, the '713 patent is not entitled to the earliest priority date of August 23, 1996.

Provisional Application 60/031,097 (filed 11/14/96)

The '097 provisional application was filed with 35 pages of specification (not including claims), 11 pages of sequence listing (SEQ ID NOs: 1-9), and 13 sheets of drawings (Figure 1a-10). SEQ ID NOs: 4 and 5 were disclosed and appear to be identical to the sequences of the issued patent (e.g., SEQ ID NO: 4 is a 2029 base cDNA from human lung and SEQ ID NO: 5 is a 354 residue protein, also from human lung). Accordingly, the sequences at issue appear to be entitled to the priority date of November 14, 1996.

Provisional Application 60/038,814 (filed 02/10/97)

The '814 provisional application was filed with 42 pages of specification (not including claims), 11 pages of sequence listing (SEQ ID NOs: 1-9), and 14 sheets of drawings (Figure 1a-11). SEQ ID NOs: 4 and 5, in a form identical to that of the issued patent, were again disclosed.

Provisional Application 60/051,426 (filed 07/01/97)

The '426 provisional application was filed with 60 pages of specification (not including claims), 21 pages of sequence listing (SEQ ID NOs: 1-11), and drawings. SEQ ID NOs: 4 and 5, in a form identical to that of the issued patent, were again disclosed.

It appears that the subject matter at issue, namely, Achen's amino acid and nucleotide sequences of SEQ ID NOs: 4 and 5 respectively, were initially disclosed in the '097 provisional, filed November 14, 1996. Accordingly, the effective filing date for Achen's VEGF-D of SEQ ID NOs: 4 and 5 is November 14, 1996, which is less than 6 months after Applicant's priority date of July 15, 1996.

In this situation, the Examiner may elect to invoke an interference, wherein Applicants would be the senior party and Achen et al. would have the burden of establishing a date of invention for SEQ ID NOs: 4 and 5 that is prior to Applicants' date of invention. However, Applicants note that if Achen et al. did indeed have possession of SEQ ID NOs: 4 and 5 prior to July 15, 1996, they would certainly have submitted the sequences with the earliest provisional application, that is, the '751 provisional application filed August 23, 1996. From these facts, it is reasonably inferred that Achen et al. did not possess the sequences at issue as of August 23, 1996, and certainly not on or before July 15, 1996. In sum, as Applicant's have benefit of the July 15, 1996 Japanese filing date, the Achen '713 patent is not prior art to the above-referenced application, and the § 102 rejection should be withdrawn.

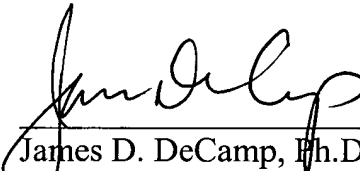
CONCLUSION

Applicants submit that the claims are in condition for allowance, and such action is respectfully requested. Enclosed is a petition to extend the period for replying for one month, to and including December 17, 2001. If there are any charges or any credits, please apply them to Deposit Account No. 03-2095.

In addition, a marked-up version of the amended specification is enclosed, as well as a clean version of pending claim 2.

Respectfully submitted,

Date: 17 December 2001



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21559

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Hirata et al.

Art Unit: 1647

Serial No.: 09/214,982

Examiner: C. Saoud

Filed: January 14, 1999

Customer No.: 21559

Title: NOVEL VEGF-LIKE FACTOR

Assistant Commissioner For Patents
Washington, DC 20231

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Marked-up Version of Specification

The paragraph bridging page 11 to page 12 has been amended as follows.

Deducing the signal peptide cleavage site (Fig. 4b) by hydrophobicity plot (Fig. 4a) and the method of von Heijne (von Heijne, G, Nucleic Acids Res. 14, 4683-4690(1986)), N-terminal 21 amino acid to both ends as a template cDNA, and using the above primer and adapter primer (AP-1 primer: 5'-CCATCCTAATACGACTCACTATAGGGC-3' (SEQ ID NO. 6), Fig. 1) as primers.

The above adapter cDNA contains the regions to which the adapter primers AP-1 and AP-2 hybridize. The PCR was performed in a manner such that the system was exposed to

treatment at 94°C for 1 min; five cycles of treatment at 94°C for 30 sec and at 72° C for 4 min; five cycles of treatment at 94°C for 30 sec and at 70°C for 4 min; then 25 cycles of treatment at 94°C for 20 sec and at 68°C for 4 min. (TaKaRa Ex Taq (Takara Shuzo) and the attached buffer were used as Taq polymerase instead of Advantage KlenTaq Polymerase Mix.) As a result, 1.5kb fragments were amplified at the 5' region and 0.9kb fragments at the 3' region. These fragments were cloned with the pCR-Direct Cloning System (Clontech), CR-TRAP Cloning System (GenHunter), and PT7Blue-T vector (Novagen). When the 5'-RACE fragment was cloned into the pCR-Direct vector, the fragment was amplified again using 5'-CTGGTTCGGCCCAGAACTTGGAACGCTGAATCA-3'(SEQ ID NO. 7) and 5'-CTCGCTCGCCCACTAATACGACTCACTATAGG-3'(SEQ ID NO. 8) as primers.